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PATENT

S/N 10/688,573

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

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Examiner: Ben C. Wang

Serial No.:

10/688,573

Group Art Unit: 2196

Filed:

October 20, 2003

Docket No.: Zeid-01

Title:

SOFTWARE TOOL FOR SYNTHESIZING A REAL-TIME OPERATING

SYSTEM

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

This responds to the Final Office Action mailed on <u>March 13, 2007</u>. Please amend the above-identified patent application as follows to put the case in condition for allowance.

IN THE CLAIMS

Please amend the claims as follows:

- 1) (Currently Amended) A method for developing a real-time operating system, comprising:
 - a) specifying a set of n tasks, task(1) through task(n), to be scheduled for execution, at least one of the tasks of said set of n tasks being selectively configurable as a preemptive or a non-preemptive task;
 - b) specifying a scheduling algorithm for scheduling the execution of said set of n tasks: and
 - c) synthesizing source code with embedded from commands embedded in source code to implement a task scheduler that uses said scheduling algorithm and said embedded commands for controlling execution of said set of n tasks, said synthesized source code being executable on a target system after compilation.
- 2) (Currently Amended) The method of claim 1) further including specifying t init-tasks that are executed only once upon initial execution of said task scheduler, t being less than or equal to n.
- 3) (Currently Amended) The method of claim 1) further including specifying f f-loop tasks, each having an associated integer value $\frac{1}{2}$ (i) for i ranging from 1 to f and f being less than or equal to n, said task scheduler including a continuously executing loop such that each f-loop task executes exactly once every $\frac{1}{2}$ (i) times that the loop is executed.